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(54) ROBOT SYSTEM FOR PERFORMING FORCE CONTROL

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See application file for complete search history.

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(57) ABSTRACT

A robot system includes a robot that operates to move a machining tool relative to a workpiece, an actuator that changes a position of the machining tool, and a control device that controls the robot. The control device includes a robot control unit that operates the robot along a predetermined motion trajectory, a force detection unit that detects force acting between the machining tool and the workpiece, a position detection unit that detects a current position of the machining tool, a force control unit that obtains a target position of the machining tool such that a detection value of the force detection unit approaches a predetermined value, and a position correction unit that calculates a position correction amount of a motion trajectory of the robot and a position correction amount of the actuator in response to the target position of the machining tool.

9 Claims, 8 Drawing Sheets

